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An Integrated Method For Cultural Resource Management

The National Historic Preservation Act of 1966, as amended (NHPA), is the most prominent federal regulation which military cultural resource managers must address. Historic documentation of military installations encompasses historic buildings, structures, objects, landscapes, and archeological resources. To meet legislative requirements, techniques for identification, evaluation and management of these resources have emerged without a coordinated approach over the years. Additionally, legislative compliance at the installation level is often handled in a reactive manner, precipitated by either scheduled undertakings or unexpected maintenance problems and issues. In this "compliance by immediate necessity" approach, each compliance case is seen as an individual event, consisting of limited historical research and fieldwork.

With the downsizing of the Department of Defense (DoD), this approach to the identification and management of cultural resources is no longer adequate. It has proven inefficient in terms of duplicated efforts, time and cost. The following factors contribute to the difficulty in cost-effective identification, management, maintenance, and preservation of cultural resources on military installations: lack of resources (manpower and funds); inability to hire needed expertise; non-uniform methodologies and guidance in significance determination; and lack of efficient methods for cultural resource identification and evaluation. A clear, concise and comprehensive approach to an installation's cultural resources documentation requirements is necessary to be both cost-effective and beneficial to all levels of installation management. This comprehensive approach translates into an organized, coherent, and coordinated effort which includes all aspects of cultural resources (i.e., inventory, evaluation, maintenance, management, adaptive use, etc.).

A comprehensive plan identifies and evaluates all areas of the installation's cultural resources at once. The plan also allows the cultural resource manager, facility planners, and Operations and Maintenance (O&M) personnel to successfully allocate time and resources for the proactive management of historic properties. Systematic procedures will assist in cost-effective, non-intrusive compliance with the NHPA through development of identification, evaluation, and maintenance processes.

Once properties have been identified as historically significant, cultural resource managers face the task of proper maintenance. Construction and maintenance techniques for more recent structures and buildings do not necessarily apply to historic structures and buildings. For example, historic bricks are softer than today's kiln-fired bricks. Historic mortar was high in lime while today's mortar consists of Portland cement, a much stronger binding material. The use of Portland cement mortar has a tendency to quickly

Space Launch Complex 10, Vandenberg Air Force Base, CA built in 1958. Complex 10 was listed as a National Historic Landmark in 1986 on the basis of its being "the best surviving example of a launch complex built in the 1950s at the beginning of the American effort to explore space." Photo by Sgt. Louis Briscese, January 1994.

destroy the much softer historic brick, therefore causing rapid deterioration of the building. Installation personnel need guidance and treatment manuals on the proper maintenance and repair of historic materials.

An integrated cultural resources management plan addresses the installation users' diverse needs in a simple, yet comprehensive, manner. Quality preservation procedures result from a combination of historical, architectural, landscape architectural, and engineering research that provides practical guidance to historic resource managers at the installation level. This approach must incorporate all levels of installation personnel, including residents and users, into the preservation initiative to be effective. Effective plans assist installation personnel in complying with federal preservation legislation in addition to encouraging residents and users to become stewards of the installation, thereby preserving the historic character.

The U.S. Army Corps of Engineers Construction Engineering Research Laboratories (USACERL) is one of four U.S. Army Corps of Engineers Research and Development Laboratories. Its mission is to create and develop technologies for sustainable military installations. At USACERL, members of the Cultural Resources Research Center (CRRC), are developing a comprehensive approach and tools for cultural resource management. All tools can be used in various combinations according to specific installation needs:

Programmatic Agreements

A Programmatic Agreement (PA) is an effective tool by which an installation may fulfill its Section 106 requirements for similar and repetitive properties, complex projects, or its entire cultural resources program. A PA, in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP), allows the Section 106 process to be tailored to the specific needs of active installations servicewide and ultimately DoD-wide.

For example, CRRC assisted Vandenberg Air Force Base (VAFB), California, with the development of an Interim PA for VAFB's numerous operational Cold War facilities. Once the ongoing review process is successfully completed, the PA will streamline VAFB's Section 106 process, allowing the base to continue its mission of research, development, and testing of missiles and satellites with minimal delay.

Plans and Guides

Preservation and Management Plans provide installation personnel with guidance on the proper management, maintenance and future use of historic buildings, structures and landscapes. Management plans evolve from baseline inventories and can ultimately result in programmatic agreements.

For example, CRRC completed a Historic Landscape Inventory and Master Plan for Fort Sam Houston, TX. The landscape inventory defined the post's historic context and identified the significant landscapes. At the completion of the inventory, CRRC developed a landscape master plan (LMP) using the following criteria: maintain or enhance the historic character, public image, and quality of life, and proper maintenance and treatment procedures. The LMP has become a significant tool for the cultural resource manager, O&M personnel, and the residents and users of Fort Sam Houston by providing a management solution that is sensitive to both the post's historic character and environmental needs.

Nationwide Theme and Context Data

The development of nationwide theme and context studies reduces the effort required to effectively identify, evaluate, manage and mitigate effects on cultural resources. Thematic studies pertain to groups of cultural resources sharing a unifying or dominant trend. Context studies provide information on historical patterns, trends, specific events, or broad areas of significance that produced the cultural resource. Theme and context studies by installation, by military service, or DoD can ultimately eliminate the need for continued property-by-property studies; provide guidance for a broad user community; and develop into PAs.

Old trooper Monument and Plaza, Fort Riley, KS, c. early 1960s. The monument and plaza, while relatively new, is a landscape feature within the post's Cavalry Parade. The parade was determined to be a significant landscape by USACERL in 1995. Photo by G.C. Burt, June 1994.

Officer Housing, Fort Bliss, TX, from 1893. USACERL has conducted research to determine the National Register of Historic Places eligibility of approximately 450 buildings and structures in and around the main cantonment area at Fort Bliss. Photo by S.A. Ellsworth, September 1995.

For example, two areas of study for CRRC are a preliminary thematic overview of DoD aircraft hangars and Cold War facilities. These studies serve as guidelines for the identification and evaluation of both aircraft hangars and Cold War cultural resources. Research in the Cold War area includes a comprehensive overview, a defense radar program theme and context study, and an anti-ballistic missile theme and context study (all sponsored by the Air Force Air Combat Command and the Legacy Program).

Historic Preservation Technical Guides

Historic preservation technical guides serve to educate and assist installation personnel (CR managers, O&M personnel, and installation users, visitors, residents) on the proper techniques to improve the efficiency and effectiveness of identifying, evaluating, repairing, maintaining and managing installation cultural resources.

For example, CRRC's technical guides pertaining to condition inspection, materials specification and repair techniques assist installation personnel with proactive maintenance of historic building materials. In contrast, current maintenance practices requires the allocation of resources for building repairs after the building elements fail. The net result would be the inefficient use of resources and potential loss of historically significant building elements.

Cultural Resources Multi-Media Systems

Cultural resources multi-media systems are interactive computer programs designed to enhance the management of cultural resources or educate installation users about cultural resources. The systems are designed for the installation end user and include several modules of data as needed, i.e., historical background, current conditions, maintenance requirements, techniques and specifications, photographs, drawings, and maps.

The CRRC designed a multi-media system for Fort Riley, Kansas, to identify, evaluate, and maintain their historic landscapes. The system was designed to allow the cultural resource manager to manage and the O&M personnel to maintain the historic landscapes. It is also a powerful tool for educating the residents on proper planting materials in keeping with the historic character of the post.

A second multi-media system was designed for Cape Canaveral Air Station (CCAS), FL. This system, entitled "Stepping Stones to the Moon," is designed as an education and public awareness tool and is located at the CCAS museum. Visitors have the option to learn about astronauts and specific space programs, play a history game, and listen to and view footage of missile launches.

These various preservation tools work together to create a comprehensive approach to cultural resource management. Theme and context studies can supply the basis for cultural resource decision-making that results in Preservation Plans and Programmatic Agreements. Guidance documents and multi-media systems can assist in the implementation of Management Plans. Using completed tools to build others avoids duplication of effort, providing a more cost-effective process. Data collected quickly, economically, and accurately provides the foundation by which the comprehensive management of cultural resources is possible.

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